

CLAIMS

The claims are amended as shown below, with their status indicated in parentheses.

1. (canceled)
2. (currently amended) A disposable lighter comprising:
a lighter body for receiving a liquefied fuel therein;
a mounting frame, which is sealedly affixed on top of said lighter body, comprising a first
and a second supporting wall upwardly extended from two sides of said mounting frame. said
mounting frame further having a vertical spring chamber between said first and second
supporting walls;
a flint spring being received in said spring chamber;
a gas lever being pivotally mounted between said first and second supporting walls;
a gas valve with a gas nozzle said gas nozzle being engaged with an end of said gas lever
to permit release of gas from an interior of said lighter body via said gas valve;
an ignition device comprising a flint and a striking wheel, said striking wheel having a
circumferential coarse striking surface being positioned right above and in contact with said flint
and rotatably mounting between said first and second supporting walls, wherein said striking
wheel further comprising two circular discs located at two sides of said striking surface, each of
said circular discs having a circumferential surface and positioned within each of two gaps
formed between said first and second supporting walls and said striking wheel; and
a U-shaped wind shield mounted on said first and second supporting walls to cover said
gas nozzle and said first and second supporting walls, said wind shield having an all around

vertical U-shaped side wall which has a round end portion and two wing portions extending from said round end portion, a top wall horizontally and inwardly extending from a top side of said round end portion of said U-shaped side wall and defining a cutout right above said gas nozzle, and a first and a second L-shaped bent-edge members which are respectively and perpendicularly bent from a top side and an end side of said wing portions, wherein said first and second bent-edge members are respectively extended from said top wall along said top side and said end side of each of said wing portions for fittedly and respectively resting on a horizontal top edge and a vertical rear edge of each of said first and second supporting walls, a top end corner of each of said wing portions forming a curved corner which has a curvature matching with at least a quarter of a circumference of said striking wheel, so that said striking wheel is sidewardly covered by said two wing portions of said wind shield, wherein said first and second bent-edge members of said wind shield are respectively and inwardly extended until abutting two sides of said striking wheel to form two protecting bent-edge members for better striking contact by increasing a contact area with a user's thumb;

A disposable lighter, as recited in claim 1, wherein each of said circular discs has a diameter equal to that of said striking wheel.

3. (currently amended) A disposable lighter, comprising:
a lighter body for receiving a liquefied fuel therein;
a mounting frame, which is sealedly affixed on top of said lighter body, comprising a first and a second supporting wall upwardly extended from two sides of said mounting frame, said mounting frame further having a vertical spring chamber between said first and second supporting walls;

a flint spring being received in said spring chamber;
a gas lever being pivotally mounted between said first and second supporting walls;
a gas valve with a gas nozzle said gas nozzle being engaged with an end of said gas lever
to permit release of gas from an interior of said lighter body via said gas valve;

an ignition device comprising a flint and a striking wheel, said striking wheel having a
circumferential coarse striking surface being positioned right above and in contact with said flint
and rotatably mounting between said first and second supporting walls, wherein said striking
wheel further comprising two circular discs located at two sides of said striking surface, each of
said circular discs having a circumferential surface and positioned within each of two gaps
formed between said first and second supporting walls and said striking wheel; and

a U-shaped wind shield mounted on said first and second supporting walls to cover said
gas nozzle and said first and second supporting walls, said wind shield having an all around
vertical U-shaped side wall which has a round end portion and two wing portions extending from
said round end portion, a top wall horizontally and inwardly extending from a top side of said
round end portion of said U-shaped side wall and defining a cutout right above said gas nozzle,
and a first and a second L-shaped bent-edge members which are respectively and perpendicularly
bent from a top side and an end side of said wing portions, wherein said first and second bent-
edge members are respectively extended from said top wall along said top side and said end side
of each of said wing portions for fittedly and respectively resting on a horizontal top edge and a
vertical rear edge of each of said first and second supporting walls, a top end corner of each of
said wing portions forming a curved corner which has a curvature matching with at least a
quarter of a circumference of said striking wheel, so that said striking wheel is sidewardly
covered by said two wing portions of said wind shield, wherein said first and second bent-edge

members of said wind shield are respectively and inwardly extended until abutting two sides of said striking wheel to form two protecting bent-edge members for better striking contact by increasing a contact area with a user's thumb;

A disposable lighter, as recited in claim 1, wherein each of said circular discs has a diameter smaller than that of said striking wheel to form a supporting disc.

4. (canceled)

5. (Previously presented) A disposable lighter as recited in claim 2, wherein a radius of said striking wheel is equal to a radius of said curved corner of each of said wing portions of said wind shield.

6. (Previously presented) A disposable lighter, as recited in claim 3, wherein a radius of said striking wheel is equal to a radius of said curved corner of each of said wing portions of said wind shield.

7. (canceled)

8. (Previously presented) A disposable lighter, as recited in claim 2, wherein a radius of said striking wheel is slightly smaller than a radius of said curved corner of each of said wing portions of said wind shield.

9. (Previously presented) A disposable lighter, as recited in claim 3, wherein a radius of said striking wheel is slightly smaller than a radius of said curved corner of each of said wing portions of said wind shield.

10. (canceled)

11. (canceled)

12. (canceled)

13. (canceled)

14. (currently amended) A disposable lighter, comprising:

a lighter body for receiving a liquefied fuel therein;
a mounting frame, which is sealedly affixed on top of said lighter body, comprising a first
and a second supporting wall upwardly extended from two sides of said mounting frame, said
mounting frame further having a vertical spring chamber between said first and second
supporting walls;

a flint spring being received in said spring chamber;

a gas lever being pivotally mounted between said first and second supporting walls;

a gas valve with a gas nozzle, said gas nozzle being engaged with an end of said gas lever
to permit release of gas from an interior of said lighter body via said gas valve;

an ignition device comprising a flint and a striking wheel, said striking wheel having a circumferential coarse striking surface being positioned right above and in contact with said flint and rotatably mounting between said first and second supporting walls, wherein said striking wheel further comprising two circular discs located at two sides of said striking surface, each of said circular discs having a circumferential surface and positioned within each of two gaps formed between said first and second supporting walls and said striking wheel; and

a U-shaped wind shield extends over said first and second supporting walls to cover said gas nozzle and said first and second supporting walls, said wind shield having an all around vertical U-shaped side wall which has a round end portion and two wing portions extending from said round end portion, and a first and a second L-shaped bent-edge members which are respectively and perpendicularly bent from a top side and an end side of said wing portions, said striking surface at an elevation lower than said bent-edge members, wherein said first and second bent-edge members are respectively extended from a top wall along said top side and said end side of each of said wing portions, a top end corner of each of said wing portions forming a curved corner which has a curvature matching with at least a quarter of a circumference of said striking wheel, so that said striking wheel is sidewardly covered by said two wing portions of said wind shield, wherein said first and second bent-edge members of said wind shield are inwardly extended to form two protecting bent-edge members for better striking contact by increasing a contact area with a user's thumb;

A disposable lighter, as recited in claim 13, wherein each of said circular discs has a diameter equal to that of said striking wheel.

15. (currently amended) A disposable lighter, comprising:

a lighter body for receiving a liquefied fuel therein;
a mounting frame, which is sealedly affixed on top of said lighter body, comprising a first
and a second supporting wall upwardly extended from two sides of said mounting frame, said
mounting frame further having a vertical spring chamber between said first and second
supporting walls;

a flint spring being received in said spring chamber;
a gas lever being pivotally mounted between said first and second supporting walls;
a gas valve with a gas nozzle, said gas nozzle being engaged with an end of said gas lever
to permit release of gas from an interior of said lighter body via said gas valve;

an ignition device comprising a flint and a striking wheel, said striking wheel having a
circumferential coarse striking surface being positioned right above and in contact with said flint
and rotatably mounting between said first and second supporting walls, wherein said striking
wheel further comprising two circular discs located at two sides of said striking surface, each of
said circular discs having a circumferential surface and positioned within each of two gaps
formed between said first and second supporting walls and said striking wheel; and

a U-shaped wind shield extends over said first and second supporting walls to cover said
gas nozzle and said first and second supporting walls, said wind shield having an all around
vertical U-shaped side wall which has a round end portion and two wing portions extending from
said round end portion, and a first and a second L-shaped bent-edge members which are
respectively and perpendicularly bent from a top side and an end side of said wing portions, said
striking surface at an elevation lower than said bent-edge members, wherein said first and second
bent-edge members are respectively extended from a top wall along said top side and said end
side of each of said wing portions, a top end corner of each of said wing portions forming a

curved corner which has a curvature matching with at least a quarter of a circumference of said striking wheel, so that said striking wheel is sidewardly covered by said two wing portions of said wind shield, wherein said first and second bent-edge members of said wind shield are inwardly extended to form two protecting bent-edge members for better striking contact by increasing a contact area with a user's thumb;

A disposable lighter, as recited in claim 13, wherein each of said circular disc has a diameter smaller than that of said striking wheel to form a supporting disc.

16. (canceled) A disposable lighter, comprising:

a lighter body for receiving a liquefied fuel therein;
a mounting frame, which is sealedly affixed on top of said lighter body, comprising a first and a second supporting wall upwardly extended from two sides of said mounting frame, said mounting frame further having a vertical spring chamber between said first and second supporting walls;

a flint spring being received in said spring chamber;
a gas lever being pivotally mounted between said first and second supporting walls;
a gas valve with a gas nozzle, said gas nozzle being engaged with an end of said gas lever to permit release of gas from an interior of said lighter body via said gas valve;

an ignition device comprising a flint and a striking wheel, said striking wheel having a circumferential coarse striking surface being positioned right above and in contact with said flint and rotatably mounting between said first and second supporting walls, wherein said striking wheel further comprising two circular discs located at two sides of said striking surface, each of

said circular discs having a circumferential surface and positioned within each of two gaps formed between said first and second supporting walls and said striking wheel; and
a U-shaped wind shield extends over said first and second supporting walls to cover said gas nozzle and said first and second supporting walls, said wind shield having an all around vertical U-shaped side wall which has a round end portion and two wing portions extending from said round end portion, and a first and a second L-shaped bent-edge members which are respectively and perpendicularly bent from a top side and an end side of said wing portions. said striking surface at an elevation lower than said bent-edge members, wherein said first and second bent-edge members are respectively extended from a top wall along said top side and said end side of each of said wing portions, a top end corner of each of said wing portions forming a curved corner which has a curvature matching with at least a quarter of a circumference of said striking wheel, so that said striking wheel is sidewardly covered by said two wing portions of said wind shield, wherein said first and second bent-edge members of said wind shield are inwardly extended to form two protecting bent-edge members for better striking contact by increasing a contact area with a user's thumb;

A disposable lighter, as recited in claim 13, wherein each of said circular discs has a diameter larger than that of said striking wheel.

17. (canceled)